25X1 CLASSIFICATION CONFIDENTIAL CENTRAL INTELLIGENCE AGENCY INFORMATION REPORT COUNTRY USSR DATE DISTR. 8 FEB 1954 25X1 **SUBJECT** Coke Industry NO. OF PAGES PLACE ACQUIRED NO. OF ENCLS. DATE ACQUIRED 25X1 SUPPLEMENT TO REPORT NO. DATE OF INFO 25X1 THIS IS UNEVALUATED INFORMATION

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The following table shows the Soviet classification of southern USER coals by content of volatile matter and coke-button characteristics. The FZh, K and PS groups were considered "suitable" coking coals, but the other groups were sometimes used in blending.

Group	Name	Symbol .	<b>V.X.</b> o/o	Coke-Button Properties
1	Long-flame coal	D	>42	Monagglomerated: Fulverulent or just coherent
2	GAS CORI	G	35-44	Agglomerated, fused, sometimes
3	Fatty-steam coal	PZh	<b>26-</b> 35	Agglomerated, fused, firm
4	Coking coal	K	18-26	近0
5	Dry-steem coal	P6	12-18	Agglomerated or fused, firm or moderate firm
6	Lean coal	Ī	<b>&lt;1</b> 7	Nonagglomerated: Pulverulent or just coherent

2.

In the pre-World War II coking industry the percentage of gas coals in coal blends in certain coking plants reached 1%. The use of gas coals in a

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coal blend made it easy to push the coke cake from the oven, reduced the cross-fissuring of the coke, and increased the yield of coal chemicals and coke-oven gas coke literature described the use of up to 25% gas coals in the Stalino coking push. In the Bonetz Besin. According to the article, this resulted in a good quality blast furnace coke, casier conditions for coke oven operation, and reduction of coking time from 16.4 hours to 15.9 hours.  The use of more gas coal results in a decreased yield of coke and an additional load on the recovery plant because of the increased yield of by-products.  Changes were necessary in the operating conditions of the coke ovens and the chemical recovery plants. (See 2 above)  Changes were necessary in the operating conditions of the coke ovens and the chemical recovery plants. (See 2 above)  7.  Ene use of class """ coals instead of "K" and "FB" coals as a leaning imponent of coal blends is very desirable, but requires special equipment for first distribution of "" coals. Nevertheless, "" coal has been used in some USGR coking plants. One example is the Staro-Makesvakiy plant which in 1934 used 8.3% """ coals.  In the first six months of 1939 the average consumption of dry coal for one to tou of dry coke was as follows:
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8.
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In the first six months of 1930 the sweeper and the
ton of dry coke was as follows:
<ul> <li>(a) In the southern coking industry - 1.418.</li> <li>(b) At the Kemenovo coking plant - 1.289.</li> </ul>
25X1 The average percentage of breeze in the coke produced in 1939 was as follows:
(a) The Donbas plants - 6.03\$
(b) One of the Ural plants 11 7g
(c) One of the Eusbas plants - 10.645
9.
The following were the principal difficulties in the coke industry in
1939:

COMPI	TIAL

(a) Goal supply. In 1938 coal deliveries to the coke industry were only 68.3% of the planned objective, and in the first six neaths of 1939 only 93.6%. In addition, 7.5% to 9.27% of the coal delivered was defective or unconditioned.

- (b) Goal cleaning. Requirements for both quantity and quality could not be met by the coal cleaning plants.
- (c) Coke production. The coke ovens could not meet the requirements of the blast furnaces in either quality or quantity. In 1938 preduction was only 87% of the planned amount, and in the first half of 1939 was 96.5%. Also the average ash content of the coke was 10.7% in the first half of 1939 when the plan called for a maximum of 10%.
- (d) Misuse of coke oven gas. The metallurgical furnaces frequently lacked fuel gas because the coke oven gas was either wasted or used for underfiring the coke ovens.

10.

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The percentage of by-product coke to total coke produced in the WEER is shown in the following table.

1929 1930 1931 1932 1934 1935 1936 79.3 84.1 86.3 90.1 89.0 89.7 91.0

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There follow the names of some non-recovery coking plants lecated in the Bonhas, viz:

- (a) Alekseyevskaya
- (b) Shirokovskaja /sic/
- (c) Sovetskaya
- (d) Eksterinovskaja sic7
- (e) Khanshoukovskaja (mig/
- (f) Eharteisekaja sic

25X1

12.

11.

The Seviets' principal interest was in the low-temperature carbonisation of some types of low-grade coals such as the type "B", long-flame coals of Lisichank in the Bonisa, the brewn coals of the Hoscow region, etc. They plasmed to establish combination power stations and chemical recovery plants. Further information on this and other questions is available at the Library of Congress.

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